

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

REC'D 22 NOV 2004

WIPO



PCT

Applicant's or agent's file reference P3122 WO ORD	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/04429	International filing date (day/month/year) 13.10.2003	Priority date (day/month/year) 11.10.2002
International Patent Classification (IPC) or both national classification and IPC G01R31/26		
Applicant AOTI OPERATING COMPANY, INC.-et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.
  - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of    sheets.

- This report contains indications relating to the following items:
  - I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand  29.04.2004	Date of completion of this report  19.11.2004
Name and mailing address of the International preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Meggyesi, Z  Telephone No. +49 89 2399-7683 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB 03/04429

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-22 as originally filed

**Claims, Numbers**

1-18 as originally filed

**Drawings, Sheets**

1/7-7/7 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/GB 03/04429**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	6-10, 12-13, 18
	No: Claims	1-5, 11, 14-17
Inventive step (IS)	Yes: Claims	
	No: Claims	1-18
Industrial applicability (IA)	Yes: Claims	1-18
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB 03/04429

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following document:

D1: A. Platzker et al: Characterization of GaAs Devices by a Versatile Pulsed I-V Measurement system (Microwave Symposium Digest, 08.05.1990)

D2: EP 0 800 091 A (Mitsubishi Electric Corp., 08010.1997)

2. The application does not meet the requirements of Article 6 PCT, because the claims are not clear.

In claim 1, the limitation intended by the feature is unclear, i.e. it is unclear what differentiates a "generally rectangular" pulse from a rectangular pulse.

Similarly, the relative terms "essentially, critically, substantially, especially, in particular, few, short, fast" used in claims 2, 7, 9, 10, 11 and 13 have no well-recognised meaning and leave the reader in doubt as to the meaning of the technical features to which they refer, thereby rendering the definition of the subject-matter of said claims unclear.

3. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-5, 11 and 14-17 is not new in the sense of Article 33(2) PCT.

**2.1 Independent claim 1**

The document D1 discloses (the references in parentheses applying to this document):

An instrument for measuring adynamic I-V conduction characteristics of a semiconductor device under test, comprising an adjustable dc bias and superimposed fast, generally rectangular synchronous bipolar pulses, and a means to measure the current response thereto at each of the two or more channels (p. 1137 col. 2, last paragraph).

For the sake of completeness it is noted, that D2 also discusses an instrument disclosed in claim 1, see D2 col. 21, l. 16-26, Fig. 22. Therefore, the subject-

matter of claim 1 is not new in the sense of Article 32(2) PCT.

**2.2 Independent claim 14**

The subject-matter of independent claim 14 corresponds in terms of method features to that of claim 1. The objections raised in respect of the latter claim, therefore, also apply mutatis mutandis, to independent claim 14.

**2.3 Dependent claims 2-4, 11, 15-17**

The subject-matter of claims 2-4 and 11 is known from D1.

Claim 2: cf. D1, p. 1138, col. 1 first par.

Claim 3: cf. D1, Fig. 1

Claim 4: cf. D1, p. 1140, col. 1, l. 1-5, Fig. 3

Claim 11: cf. D1, p. 1137, col. 2, last 2 lines - p. 1138, col. 1 first line

The subject-matter of claims 5 is known from D2.

Claim 5: cf. D2, col. 2, l. 57 - col. 3, l. 10

The subject-matter of claims 15-17 correspond in terms of method features to that of claims 3-5, the objections raised in respect of the latter claims, therefore, also apply mutatis mutandis, to claims 15-17.

**3. Dependent claim 6**

Adjusting a dc bias with a stabilized voltage source is a customary practice that a person skilled in the art would follow, the subject-matter of claim 6 therefore does not involve an inventive step (Article 33(3) PCT).

**4. Dependent claims 7-10, 12-13, 18**

The additional features of dependent claims 7-10, 12-13 and 18 disclose merely straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed.